



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,451	07/09/2003	Laurent Dulau	S1022.81065US00	1042

23628 7590 06/15/2004

WOLF GREENFIELD & SACKS, PC  
FEDERAL RESERVE PLAZA  
600 ATLANTIC AVENUE  
BOSTON, MA 02210-2211

EXAMINER

WELLS, KENNETH B

ART UNIT

PAPER NUMBER

2816

DATE MAILED: 06/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/616,451

Applicant(s)

DULAU ET AL.

Examiner

Kenneth B. Wells

Art Unit

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/5/04
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 2816

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

2. The disclosure is objected to because of the following informalities: on page 1, line 31, "one at least" should be changed to --at least one--. On page 2, line 2 is grammatically improper. On page 3, line 26, the word --of-- should be inserted after "deactivation". On page 6, lines 3-4 are backward, i.e., the base of transistor 2 is connected to the emitter of transistor 3, not the other way around. On page 10, line 4, "switch" should be changed to --circuit breaker-- for purposes of consistency.

3. The drawings are objected to because block 30 in Fig. 1 needs a text label. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement

Art Unit: 2816

sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency.

Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite because the recitation on lines 4-5, "a high, respectively low, voltage" makes no sense (it appears that "respectively low," should be deleted here). The same type of problem occurs on the last three lines of claim 1 with regard to "anode, respectively its cathode".

Art Unit: 2816

Claim 2 is indefinite because the last five lines are grammatically awkward to the point that it cannot be determined what is meant on these lines.

Claim 6 is indefinite because "a seventh N-channel MOS transistor" on line 4 lacks antecedent basis (because claims 1 and 2 do not include fifth, sixth N-channel MOS transistors), as does "second controllable circuit breaker" on line 6.

Claim 9 is indefinite because it is inconsistent with claim 1, i.e., no embodiment of the instant invention is seen to be described having all of the limitations of claim 1 plus all of the limitations of claim 9.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by any one of Abbott, Halberstein and Sobue et al.

In Abbott, note Fig. 1, where the recited "power transistor" reads on transistor Q5; the recited "bipolar transistor" reads on transistor Q4; and the recited "first

Art Unit: 2816

diode" reads on any one of the diodes D9-D11. The recitation in the preamble "for controlling a voltage-controlled switch" is merely intended use and has not been accorded any patentable weight. The recited "first predetermined voltage" of claim 1 reads on voltage Vbb, the high and low voltages of claim 1 are Vaa and Vcc, respectively, and the recited "two circuits" (lines 1-2) read on networks A and B, respectively.

In Halberstein, note Fig. 1, where the recited "power transistor" reads on transistor Q2; the recited "bipolar transistor" reads on transistor Q3; and the recited "first diode" reads on diode 34. The recitation in the preamble "for controlling a voltage-controlled switch" is merely intended use and has not been accorded any patentable weight. The recited "first predetermined voltage" of claim 1 reads on the potential between the cathode of diode 34 and the base terminal of BJT Q6, the high and low voltages of claim 1 are Vcc and ground, respectively, and the recited "two circuits" (lines 1-2) read on the combination of Q2, Q3 and Q4, Q5, respectively.

In Sobue et al, note Fig. 1, where the recited "power transistor" reads on transistor T107; the recited "bipolar transistor" reads on transistor T106; and the recited "first diode" reads on diode D102. The recitation in the preamble "for controlling a voltage-controlled switch" is merely intended use

Art Unit: 2816

and has not been accorded any patentable weight. The recited "first predetermined voltage" of claim 1 reads on the ground voltage, the high and low voltages of claim 1 are Vcc1 and ground, respectively, and the recited "two circuits" (lines 1-2) read on the combination of T106, T107 and T109, T110, respectively.

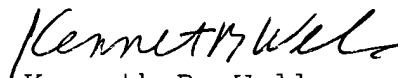
6. Claims 2-10 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth B. Wells whose telephone number is (571)272-1757. The examiner can normally be reached on Monday through Friday from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan, can be reached at (571)272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2816

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kenneth B. Wells  
Primary Examiner  
Art Unit 2816

June 10, 2004